APPLICATION FOR AMENDMENT OF COMPLIANCE SCHEDULES FOR CEASE AND DESIST ORDERS NOS. 79-119 and 79-120

JUNE 21, 1980

SUBMITTED TO: BAY AREA REGIONAL WATER QUALITY CONTROL BOARD

BY: CITY AND COUNTY OF SAN FRANCISCO

Roger Boas, Chief Administrative Officer

Jeffrey Lee, Director, Department of Public Works and Wastewater Program

Donald Birrer, Executive Director, Wastewater Program

OFFICE OF

CHIEF ADMINISTRATIVE OFFICER

ROGER BOAS
CHIEF ADMINISTRATIVE OFFICER

289 CITY HALL
SAN FRANCISCO
CALIFORNIA 94102
415/558-4851

June 21, 1980

Mr. John Keker, Chairman
Regional Water Quality Control Board
832 Sansome Street
San Francisco, CA 94111

Dear Mr. Keker:

I am pleased to transmit our application to amend the compliance schedules contained in Cease and Desist Orders Nos. 79-119 and 79-120.

This application contains our rationale for seeking new compliance dates, a detailed comparison of the original and proposed compliance of the original and proposed compliance dates, descriptions of all of the physical modifications needed to achieve staged implementation of the Master Plan and a detailed cash flow analysis.

Under the proposed re-scheduling, full compliance with your overflow criteria will be accomplished approximately a year earlier than under the present schedule. Further, the proposed staged implementation minimizes the likelihood of "white elephants" should grant funding be eliminated or delayed.

This proposal does not contain an extensive amount of technical and engineering data, since the City does not contemplate a change in the final system.

We think you will concur with us that the proposed compliance schedule attains the maximum environmental benefits in the most fiscally responsible manner.

If the members of the Board or your staff desire additional information, we would be pleased to oblige.

Very truly yours,

Roger Boas
Chief Administrative Officer

cc: Members of the Regional Board
Fred Dierker, Executive Officer

TABLE OF CONTENTS

INTRODUCTION

The City and County of San Francisco ("City") through its Wastewater Program hereby applies for amendment of the compliance schedules contained in Cease and Desist Orders ("CDO's") Nos. 79-119 and 79-120 issued by the Bay Area Regional Water Quality Control Board ("Regional Board"). The specific modifications requested are set forth in Appendix F. The amendment is requested to permit the Wastewater Program to modify in certain respects the staging of construction of the San Francisco Wastewater Master Plan ("Master Plan") to accelerate the attainment of significant environmental benefits and to enhance the cost effectiveness of the Master Plan.

Although specific modifications of the compliance schedules of the CDO's are requested in order to accommodate the staging described in this application, this application does not propose any change in the Master Plan. The policy of the City is to implement the Master Plan. That Master Plan was adopted in 1974, and most recently was confirmed by the Board of Supervisors in February, 1980.

The present schedule for implementation of the Master Plan proposed by the City and approved by the Regional Board and the State Water Resources Board ("State Board") and reflected in the compliance schedules in the CDO's

requires the construction of very large individual elements without due regard to the time at which these elements could be put to use. The fundamental assumptions underlying the original staging of the Master Plan were that (1) City, State and Federal funding sources would be relatively unrestricted in amount and in timing of availability; (2) all elements could be constructed within a short timespan; and (3) the inflation rate during the construction period would not exceed 10%. These assumptions have proven to be erroneous in whole or in part.

In attempting to resolve the problems inherent in the current schedule, the City has been guided by certain environmental principles and priorities. These are: (1) the Master Plan should be implemented to produce compliance with specific legal environmental requirements (such as overflow limits) at a sooner rather than a later date; (2) treatment of dry weather flow is of higher priority than that of wet weather flow; and (3) with regard to the Bay, the elimination of untreated overflows is more important than eliminating entirely the discharge of treated effluent into the Bay.

This application sets forth an implementation approach which the City believes represents the optimum balance among these key factors:

1. Environmental law requirements and priorities;

2. Projected funding capabilities of the City, State and Federal governments;

3. Construction capabilities of the construction industry and the City; and

4. Public acceptance of the Wastewater Program.

The City proposes to reschedule construction of the elements of the Master Plan so that each element can be used to the fullest extent possible as soon after completion as possible. In addition, the stages described below are structured so that at the end of each stage the City has a working system that provides substantial environmental benefits consistent with the cost of the stage. The stages proposed are:

Stage I: This stage includes all completed work (such as the Southeast Plant, and Northshore and Channel Transports), as well as work as required to make facilities in place operational. Stage I is represented in red on Diagram 1.

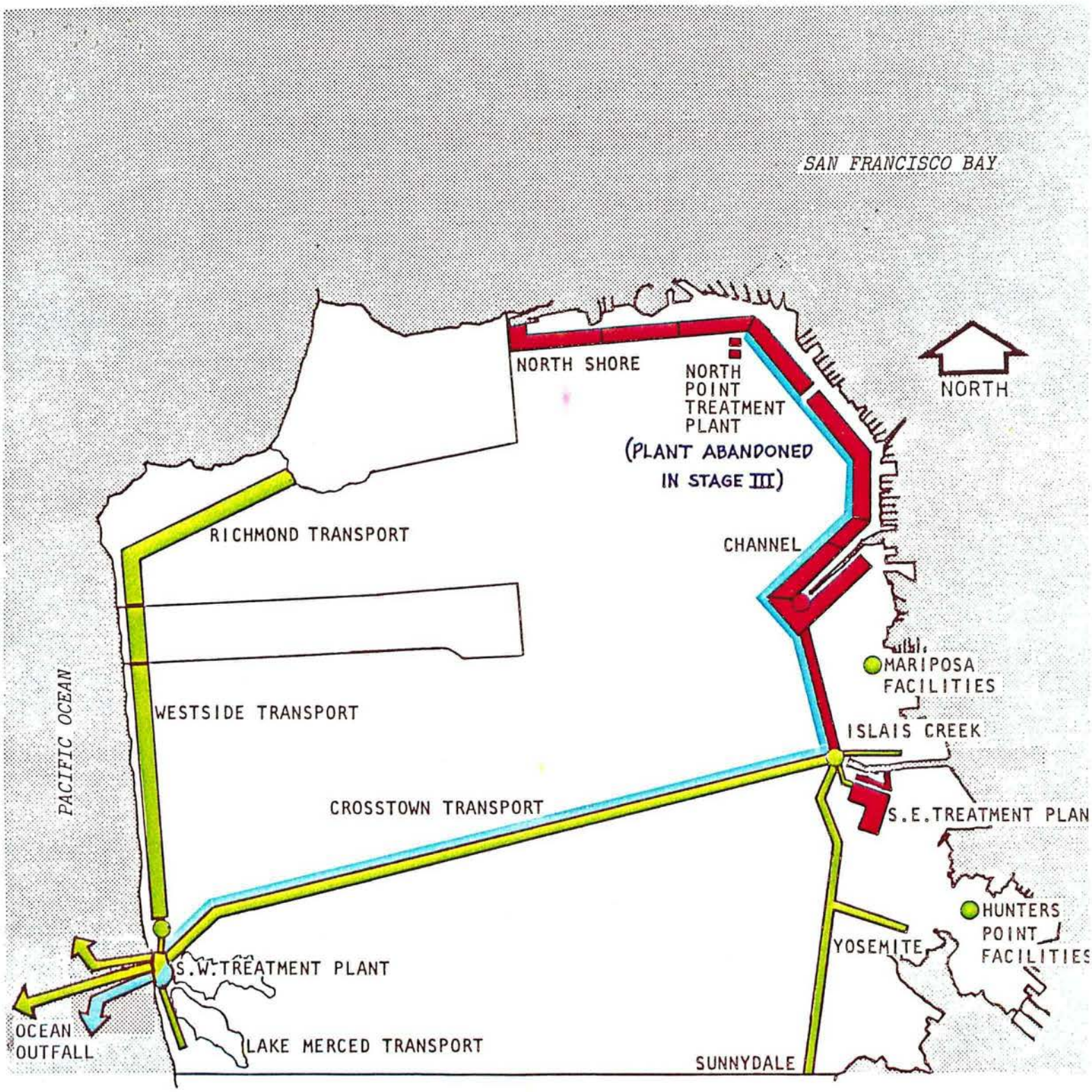
Stage II This stage encompasses the Westside hydraulic core (including the Westside Transport, two of the three barrels of the Ocean Outfall and phase 1 of the Southwest Plant) the Crosstown Transport, remaining major elements of the Bayside system (except the Channel Islais

force main), and the Richmond and Lake Merced transport systems. In addition the actions necessary to provide for City-wide disposal of solids will be completed during Stage II. Stage II is represented in green on Diagram 1.

Stage III This stage includes all elements necessary to enlarge Stage II facilities (such as the Southwest Plant) and construct remaining elements (such as placing an additional chamber within the Crosstown Transport) necessary to transport, treat and discharge all effluent to the ocean. It will also include abandonment of the North Point treatment plant. Stage III is represented in blue on Diagram 1.

The specific elements included in Stages I, II and III, and the costs associated with each, are set forth in Appendix D.

The revised schedule contained in this Application contemplates construction of all Master Plan facilities. Accordingly, no new or different technical or scientific data is included in this Application. All such data necessary to an analysis of the rescheduled Master Plan has been submitted to the Regional Board in connection with its prior reivews of the Master Plan.



STAGE I

STAGE II

STAGE III

COST EFFECTIVENESS AND ENVIRONMENTAL BENEFITS

One of the principal purposes of the rescheduling proposed in this application is to overcome certain problems inherent in the current implementation schedule for the Master Plan described in the Introduction. The rescheduling assures the City and environmental regulatory agencies that at each stage of construction there will be substantial environmental improvements from the current situation consistent with the funds spent on that stage.

As a point of reference, the City's present wastewater system captures and treats at a primary level all of the dry weather flow throughout the City. Discharge of such treated dry weather flow is at two points within the Bay and one point along the ocean shoreline. In wet weather approximately one third of the flow is captured and treated at a primary level. The balance is discharged raw at 39 points along the Bay and ocean shorelines.

At the end of Stage I, which is nearing completion, all Bay side dry weather flow will be given secondary treatment before being discharged into the Bay. Fifty percent of the Bayside wet weather flow will be captured, treated and discharged to the Bay as primary and secondary effluent. In addition, the transports, coupled with baffling at overflow

points, will remove a significant amount of settleable solids and floatables from wastewater which does overflow. Completion of Stage I will bring total expenditures to approximately $400 million.

When Stage II is completed in 1985, the City will have an integrated system for the capture and treatment of all dry and wet weather flow city-wide. This integrated system will meet all requirements with respect to overflows as provided in existing orders of the Regional Board. Approximately 95% of all annual flow will be discharged into the ocean. All dry weather flow will be discharged into the ocean. The remaining 5% of flow will be discharged to the Bay, but only during wet weather. Wet weather Bay discharges will consist one-third of secondary treated effluent and two-thirds of primary treated effluent. Completion of Stage II will bring expenditures to approximately $1.6 billion.

Stage III will complete all facilities included in the Master Plan, and will raise the expenditure level to $2.3 billion. These facilities will eliminate the discharge of treated wet weather flow into the Bay and discharge such flow into the ocean.

The comparative costs and the time frame within which environmental benefits are achieved under the original and the revised staging of the Master Plan are illustrated

in Diagram 2. Following Diagram 2 is a listing of the major elements of the Master Plan with the date of completion applicable to each under both the original and revised staging of the Master Plan.*/

A key benefit is the advancement of the operation of the Southwest Plant. Completion of phase I of the Southwest Plant is the critical project necessary to make the Westside hydraulic core operational. The date for the completion of phase I of the Southwest Plant under the revised staging brings this plant on line a year earlier than the current schedule. Although commencement of construction of certain elements on the Westside is delayed (Westside Transport, Pump Station, Richmond Transport, Lake Merced Transport and Ocean Outfall) all of these projects will still be in place prior to or at the time the Southwest Plant becomes operational.

Two items required for Stage II of the revised staging of the Master Plan are non-convertible in that they will not be used once Stage III is completed. These are: (1) a force main from Channel Pump Station to the North Shore System within the Channel Outfall Consolidation; and (2) a sludge force main from Southwest Plant to Richmond-Sunset

---

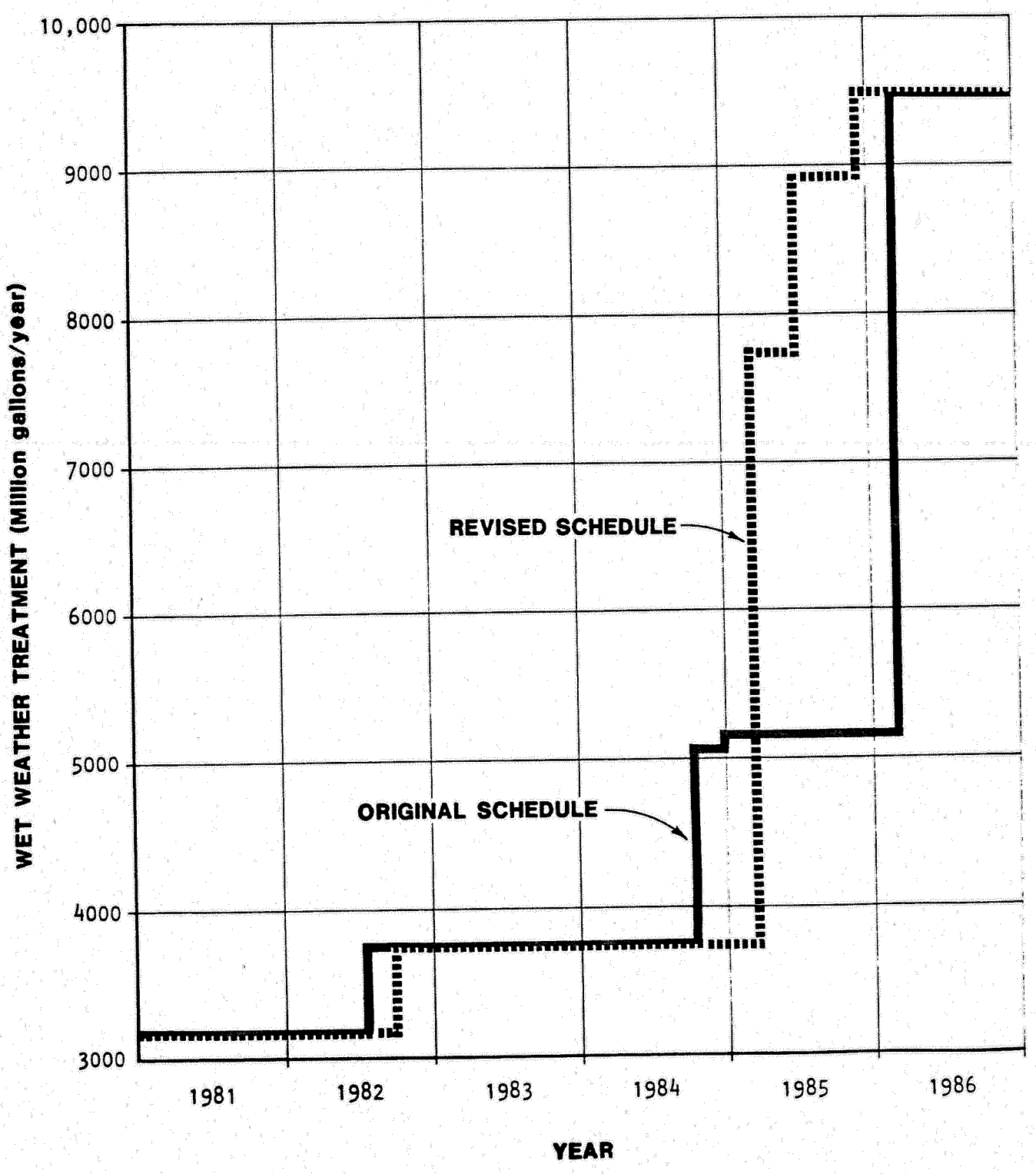
*/ Since the Master Plan schedule previously called for a staged approach, the rescheduling proposed in this application has been designated the "revised" staging while the previous schedule for the Master Plan is referred to as the "original" staging.

Plan. The total cost of these two items is approximately $5.9 million, or only .25% of total Master Plan costs.

As Diagram 2 shows, the proposed staging provides superior cost effectiveness and accelerates by one year the achievement of total wet weather capture and treatment. Correspondingly, the required reduction in number of overflows will be achieved one year sooner than originally scheduled.

The acceleration of these environmental benefits is accomplished at an aggregate expenditure level of $1.6 billion. Moreover, under the proposed rescheduling each element constructed can be put into use sooner and all elements in each stage will fit together into an operating system. No element will be isolated or under-utilized. This benefit is particularly significant in view of the requirements for and prospects for funding addressed in the following section.

CAPTURE AND TREATMENT OF WET WEATHER FLOWS UNDER ORIGINAL AND REVISED SCHEDULES



MILESTONE DATES

STAGE II

Facility	Original CDO Dates		Proposed CDO Dates	
	Award Contract	Complete Construction	Award Contract	Complete Construction
SWOOP	8/1/80	(9/84)	5/1/81	12/84
SWWPCP	11/30/81	(2/86)	11/30/81	2/85
WST Last Contract	10/30/80	1/1/83	12/1/81	7/1/84
Crosstown PS & FM	4/1/82	(5/85)	7/1/82	8/85
SEWPCP Exp.	---	7/30/82	---	7/30/82
Richmond Transport	12/15/81	(1/86)	8/15/82	2/85
North Point WW Operation	---	3/1/82	---	9/15/82
Crosstown Transport	5/1/82	(9/85)	9/1/82	12/85
Mariposa	5/1/83	(12/84)	11/1/82	6/84
Channel-Islais Facilities	8/1/82	(9/84)	11/1/82	12/84
Islais Creek Trans/Storage	11/1/82	(6/85)	11/1/82	6/85
Hunter's Point	6/1/83	(1/85)	12/1/82	7/84
Sunnydale/Yosemite	11/1/82	(9/85)	12/1/82	11/85
Lake Merced	5/15/82	(1/86)	12/15/82	2/85
SEWPCP W/W Split Flow	---	---	7/83	2/85

STAGE III

Facility	Original CDO Dates		Proposed CDO Dates	
	Award Contract	Complete Construction	Award Contract	Complete Construction
North Shore WW Transport	9/1/82	---	5/86	6/88
Crosstown Transport (inc. PS)	---	---	5/86	6/88
Channel-Islais	---	---	5/86	6/88
SWOOP, Phase II	---	---	5/86	12/88
SWWPCP, Phase II	---	---	5/86	1/89

( ) Schedule date - not contained in CDO

FUNDING REQUIREMENTS AND AVAILABILITY OF FUNDS

San Francisco can fund its local share of Stages I and II of the proposed rescheduling from the sale of bonds which already have been authorized by the voters. Assuming the timely commitment of federal and state grant funds and the sale of authorized City bonds, contracts can be awarded as scheduled for all Stage II planning, design and construction. In order to complete Stage III on schedule additional state and City bonds and continued federal funding would be required. According to the State Board, a new state bond issue would be necessary in 1982-83. A new City bond authorization would not be required until 1984-85.

The San Francisco charter requires that before a contract can be awarded all funds must be in hand or available pursuant to enforceable grant contracts. Thus, contracts will be held up unless the State Board and the Federal government can commit their respective shares of the contract price. As shown on the accompanying graph the revised schedule greatly reduces the initial impact of these fund requirements.

A reduction in the demand for grant funds does not imply any lack of activity by the City. In fact, a financial analysis for Stage II indicates a cash flow or payout of

over $70*/ million per quarter from November 1982 through April 1985, a 29-month period. Within this period, the maximum one-year rate of construction expenditures would be approximately $370 million from October 1983 through September 1984. This is an extraordinary level of activity by any standards. Indeed, the level of activity contemplated even under the revised scheduling will place a severe load on the capabilities of the construction industry and the City.

To attain this level of construction expenditures funds will have to be committed at an even more rapid rate to permit contracts to be awarded. This initial commitment is $388 million in 1980-81. Peak commitment levels of $458 million will be required for Stage II in 1981-82, and $658 million for Stage III in 1985-86. In order to award contracts on schedule, State and Federal grant contracts for at least 85% of the total contract costs will be required. The table in Appendix E shows the schedule for the commitment of City and State and Federal grant funds as specific contracts are awarded.

Quarterly cash flow is shown on the accompanying table and commitments under the proposed scheduling are set forth in Appendix E. These detailed listings are also the basis for

---

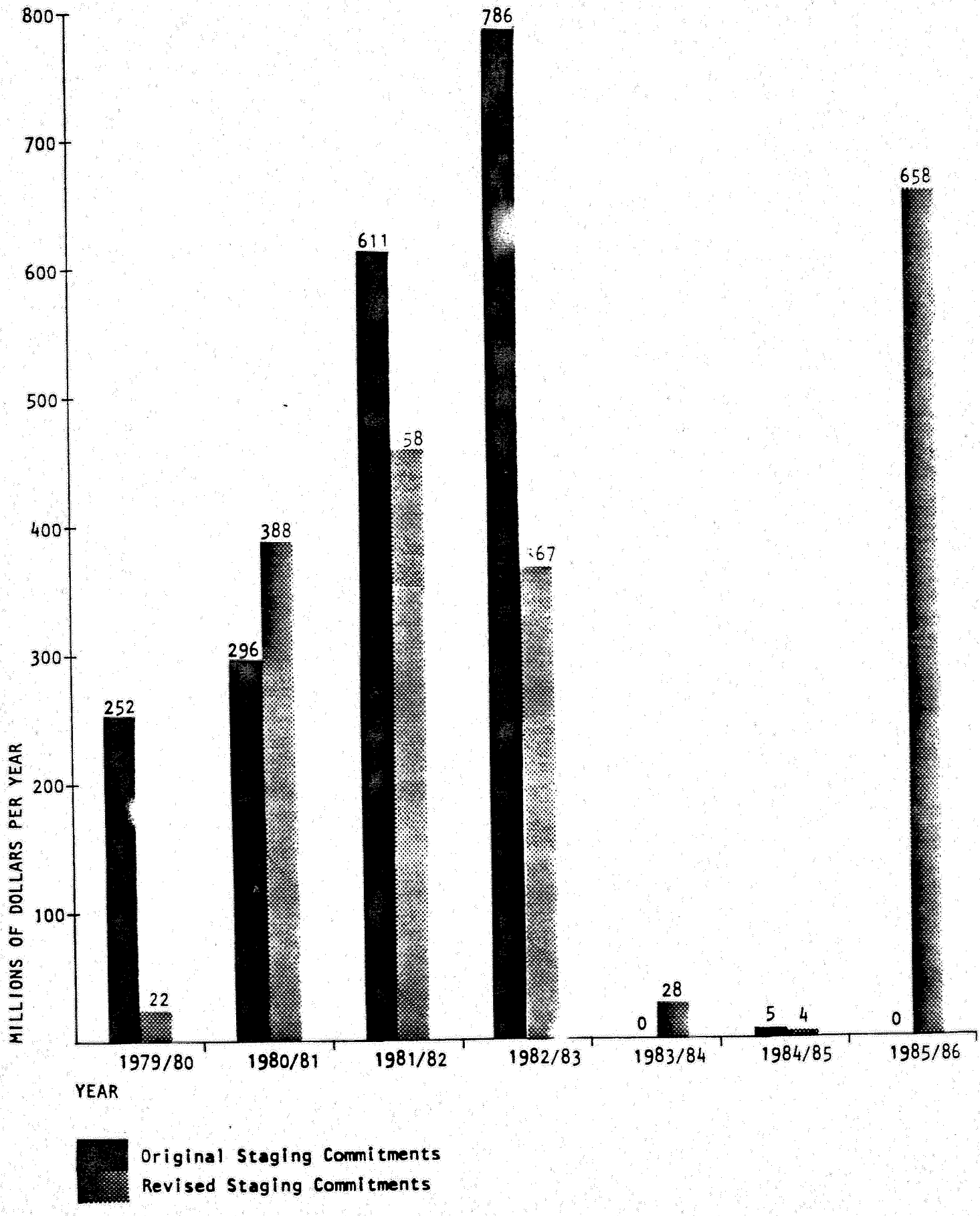
*/ All dollar figures used in this application are based on the assumption of a 15% inflation rate to the mid-point of construction.

the accompanying summary of cash and commitment needs by fiscal year.

The funding requirements of the proposed rescheduled Master Plan are more consistent than the original schedule with the funding anticipated to be available from the State Board and the Environmental Protection Agency during the period 1980-85. Attached as Appendix H is a telegram from Barbara Blum, Deputy Administrator, EPA, to Dianne Feinstein, Mayor, City and County of San Francisco, dated May 29, 1980. Ms. Blum indicates that funding of Clean Water Projects will be stretched out. Certain funds appropriated for this fiscal year will be made available only in the following fiscal year, and not all funds appropriated for the following fiscal year will be disbursed during that fiscal year.

This "stretch-out" of Federal funding accordingly reduces the amount available to fund the Master Plan in any single year. The proposed rescheduling, by making lower demands on available funding in specific years, is responsive to the practical situation expressed in Ms. Blum's telegram.

Wastewater Program
Future Commitments
(IN MILLIONS OF DOLLARS)



REVISED SCHEDULE
SAN FRANCISCO WASTEWATER PROGRAM
ESTIMATE, QUARTERLY FLOW BY SOURCE

DATE Ending	OTH AMOUNT	CITY SHARE	CITY CUM	STATE SHARE	STATE CUM	FEDERAL SHARE	FEDERAL CUM
JUNE 1980	2.93	0.44	0.44	0.36	0.36	2.13	2.13
SEP. 1980	5.22	0.78	1.22	0.63	0.99	3.80	5.94
DEC. 1980	5.67	0.85	2.07	0.69	1.68	4.13	10.07
MAR. 1981	21.22	3.18	5.26	2.58	4.25	15.46	25.53
JUNE 1981	25.63	3.84	9.10	3.11	7.37	18.67	44.20
SEP. 1981	21.55	4.73	13.83	3.83	11.20	22.99	67.19
DEC. 1981	37.29	5.59	19.43	4.53	15.73	27.17	94.36
MAR. 1982	45.95	6.89	26.32	5.58	21.31	33.48	127.84
JUNE 1982	54.48	8.17	34.49	6.62	27.92	39.69	167.53
SEP. 1982	58.58	8.79	43.28	7.11	35.04	42.68	210.21
DEC. 1982	74.18	11.13	54.41	9.01	44.04	54.05	264.26
MAR. 1983	85.46	12.82	67.23	10.38	54.42	62.26	326.53
JUNE 1983	88.36	13.25	80.48	10.73	65.15	64.36	390.89
SEP. 1983	86.20	12.93	93.41	10.47	75.61	62.80	453.69
DEC. 1983	94.20	14.13	107.54	11.44	87.05	68.63	522.32
MAR. 1984	94.86	14.23	121.77	11.52	98.57	69.11	591.43
JUNE 1984	91.78	13.77	135.53	11.15	109.72	66.87	658.31
SEP. 1984	89.85	13.48	149.01	10.91	120.63	65.46	723.77
DEC. 1984	84.70	12.70	161.71	10.28	130.91	61.71	785.48
MAR. 1985	65.72	9.86	171.57	7.98	138.89	47.88	833.36
JUNE 1985	51.68	7.75	179.33	6.28	145.17	37.66	871.01
SEP. 1985	30.44	4.57	183.89	3.70	148.86	22.18	893.19
DEC. 1985	26.34	3.95	187.84	3.20	152.06	19.19	912.38
MAR. 1986	10.67	1.60	189.44	1.30	153.36	7.78	920.16
JUNE 1986	3.86	0.58	190.02	0.47	153.83	2.81	922.97
SEP. 1986	43.83	6.57	196.60	5.32	159.15	31.94	954.91
DEC. 1986	67.95	10.19	206.79	8.25	167.40	49.51	1,004.41
MAR. 1987	67.95	10.19	216.98	8.25	175.65	49.51	1,053.92
JUNE 1987	67.95	10.19	227.17	8.25	183.90	49.51	1,103.43
SEP. 1987	67.95	10.19	237.37	8.25	192.15	49.51	1,152.94
DEC. 1987	67.95	10.19	247.56	8.25	200.41	49.51	1,202.45
MAR. 1988	67.95	10.19	257.75	8.25	208.66	49.51	1,251.95
JUNE 1988	67.95	10.19	267.95	8.25	216.91	49.51	1,301.46
SEP. 1988	57.97	8.70	276.64	7.04	223.95	42.24	1,343.70
DEC. 1988	47.99	7.20	283.84	5.83	229.78	34.96	1,378.66
MAR. 1989	34.10	5.12	288.96	4.14	233.92	24.85	1,403.51
TOTALS	1,926.38		288.96		233.92		1,403.51

PRESENT OBLIGATION	359.00
PROGRAM TOTAL	$2,285.38

EFFECT OF PROPOSED CEASE AND DESIST ORDERS COMPLIANCE SHEDULES

To permit the revised staging of the Master Plan, the City requests that the Regional Board change the existing CDO compliance dates to correspond with the revised schedule. A detailed list of proposed changes is included as Appendix F.

Most of the proposed changes are relatively minor in practical effect. That is because the existing CDO compliance dates require certain elements to be completed up to one year before those elements could be used. For example, the Westside Transport and Pump Station are currently required to be completed 36-months before the Southwest Plant becomes operational. Under the proposed rescheduling, the Transport and Pump Station would be completed seven months before phase 1 of the Southwest Plant. This does not result in any delay in the improvement of water quality as compared to the original staging of the Master Plan.

Most of the other proposed changes either would advance completion of elements (such as the Hunter's Point and Mariposa Facilities and the Lake Merced and Richmond Transports) or permit delays not exceeding three months in completion dates (such as the Crosstown Transport, Crosstown Pump Station ad Force Main, Channel Islais Facilities and Sunnydale/Yosemite Transport).

The key difference, and the source of the greater cost-effectiveness of the proposed rescheduling, is the construction of the Ocean Outfall ("SWOOP") and the Southwest Plant in phases, and the installation of additional chambers into the Crosstown Transport at a later date.

These changes permit attacking the major problems, such as raw sewage overflows into the Bay, first, and attaining substantial improvement in overall water quality at an earlier date, as described under "Cost Effectiveness and Environmental Benefit." Moreover, these changes result in reduced demands for State, Federal and City funds in specific years, making it more likely that necessary funds will be available in those years. Finally, the proposed rescheduling reduces the risk that if funds should be reduced seriously or become unavailable, the City will have built oversized, unconnected elements that cannot be integrated into an efficient working system.

ENVIRONMENTAL REVIEW ISSUES

The Regional Board staff requested that the City address two issues concerning environmental review relating to the proposed rescheduling: (1) Would the proposed rescheduling require complete revision of the Master Plan EIR/EIS prepared in 1974?; and (2) What, if any, additional environmental review would be required under the revised scheduling?

With respect to the Master Plan EIR/EIS, it is the opinion of counsel, and Wasterwater Program staff that the proposed rescheduling would not require further environmental review under applicable Federal or California law. The original EIR/EIS contemplated construction in stages to reach certain objectives. The same objectives are maintained in the current proposal; only the order of construction is modified. The mere change in order of construction does not present questions of environmental effect sufficient to require any further environmental review of the Master Plan.

As to specific projects:

1. Ocean Outfall. Counsel and Wastewater staff have concluded that no additional environmental review is required. To confirm the accuracy of this determination, the City has retained a well-qualified marine

biologist to advise it on this issue. Any additional environmental review which might be required would be processed while the outfall redesign is being prepared.

2. Southwest Plant. Counsel and Wastewater staff have concluded that at most only an administrative amendment to the previously completed EIR would be required and this could be processed during Step 2 design. Thus, there would be no delay in start of construction.

3. Crosstown Transport. An EIR is currently in preparation for this project. That EIR would address any additional environmental issues that might be presented by the revised schedule.

4. Southeast Plant. The proposed rescheduling contemplates split flow processing during wet weather at the Southeast Plant. The split flow will involve certain additional construction, the impact of which will be addressed in a future elemental EIR as the precise configuration of the split flow is being designed. The construction thus would not be delayed to await completion of environment review.

All future EIR's for program elements will appropriately address the scheduling impacts. This would not delay completion of the EIR's or the start of construction of any element.

PUBLIC ACCEPTANCE

The staff of the Regional Board requested that the City comment on the public acceptance of the proposed rescheduling of the Master Plan.

The Mayor and Chief Administrative Officer of the City both have endorsed the staged approach as environmentally responsible and fiscally sound. The proposed rescheduling has received broad publicity throughout San Francisco, and in the main specific comments have been favorable.

Apart from public response to the specific rescheduling proposed in this application, the entire Wastewater Program received a major vote of confidence in the recent June election. The voters rejected, by a 60% to 40% majority, Proposition T, which would have rescinded the authorization to sell revenue bonds to support the Wastewater Program. Proposition T was defeated in each of the City's eleven supervisorial districts. That vote followed a campaign in which all elements of San Francisco – environmentalists, labor, downtown business interests and neighborhoods – joined together to support the environmental goals of the Wastewater Program.

This vote is only one in a series of actions taken by the voters and City government to support the Wastewater Program over the years. When the hard question is asked,

"Shall we continue with our Wastewater Program?" San Francisco has each time responded, "Yes."

In 1970 and 1972 the voters of San Francisco authorized issuance of City general obligation bonds to support improvements in the City's sewer treatment capabilities. Since 1975, the City has sold more than $75 million of general obligation bonds, and applied the proceeds to the City's Wastewater Program.

In November, 1976, the voters of San Francisco authorized the issuance of up to $240 million in revenue bonds to pay for the facilities required by the Master Plan. Of that total amount, $55 million have been sold and the proceeds applied to the construction of Stage I facilities.

Construction of Master Plan facilities commenced in 1977. To date the Board of Supervisors has authorized construction of, and appropriated the City share of funds for, over $400 million in Master Plan facilities.

After lengthy hearings, in February, 1980, the Board of Supervisors reaffirmed the City's commitment to the Master Plan, by adopting the Facilities Plan for the Southwest Treatment Plant and appropriating the City funds necessary for designing that Plant.

Thus in the final analysis the City and its voters consistently have acted to support the environmental goals of the Master Plan. The recent rejection of Proposition T

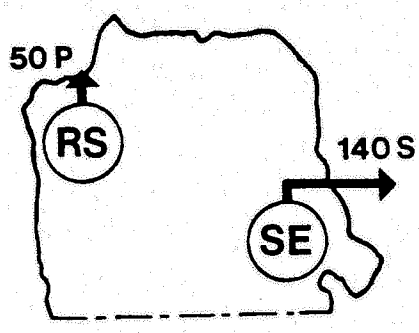
is the best evidence that the citizens of San Francisco recognize the City's environmental responsibilities under law and support the actions necessary to discharge those responsibilities.

Consequently, the rescheduled construction of the Master Plan as contemplated in this application has public acceptance and support in San Francisco.

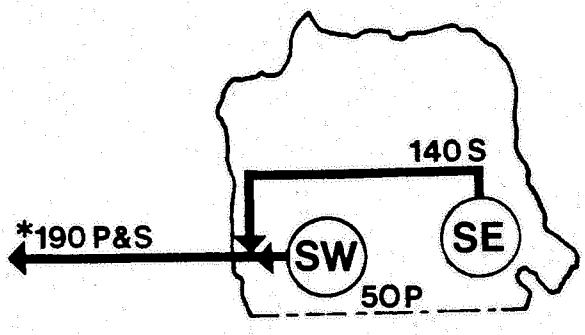
APPENDIX A

PEAK TREATMENT RATES · DRY WEATHER · MGD

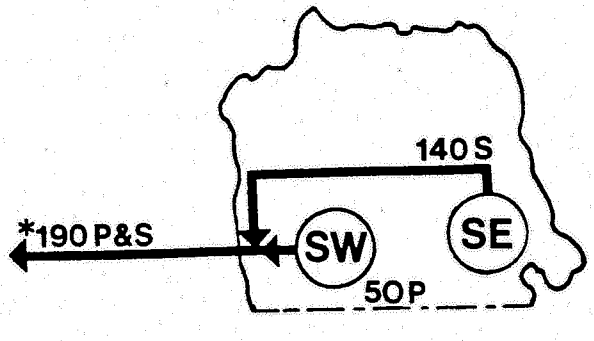
STAGE I



STAGE II



STAGE III



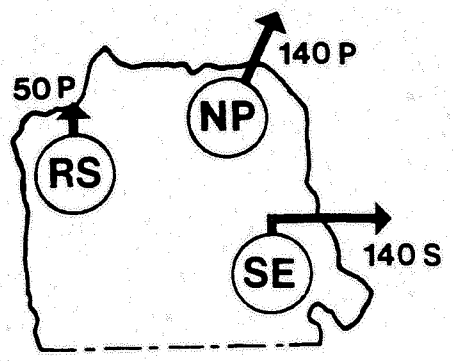
P · PRIMARY EFFLUENT
S · SECONDARY EFFLUENT
* INCLUDES 140 SECONDARY EFFLUENT

PLANT CAPACITIES (MGD)	STAGES		
	I	II	III
RS - RICHMOND/SUNSET SE - SOUTHEAST SW - SOUTHWEST	50 P 140 S 0	0 140 S 50 P	0 140 S 50 P
TOTALS	190	190	190

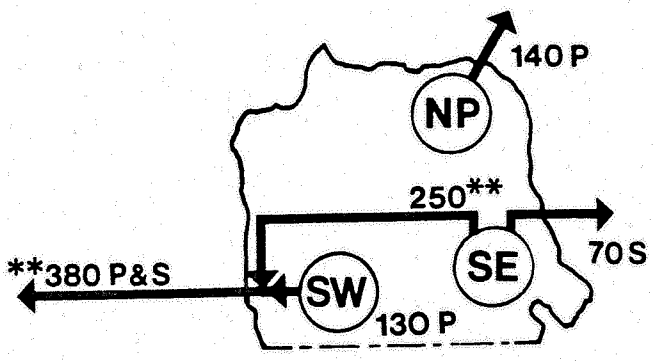
APPENDIX B

PEAK TREATMENT RATES · WET WEATHER · MGD

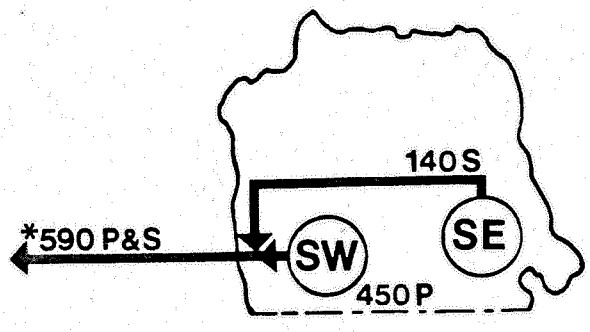
STAGE I



STAGE II



STAGE III



P · PRIMARY EFFLUENT
S · SECONDARY EFFLUENT
* INCLUDES 140 SECONDARY EFFLUENT
** INCLUDES 70 SECONDARY EFFLUENT

PLANT CAPACITIES (MGD)	STAGES		
	I	II	III
RS - RICHMOND/SUNSET	50 P	0	0
NP - NORTH POINT	140 P	140 P	0
SE - SOUTHEAST	140 S	320 P&S*	140 S
SW - SOUTHWEST	0	130 P	450 P
TOTALS	330	590	590

APPENDIX C

PROJECT DESCRIPTIONS - REVISED IMPLEMENTATION PLAN

This is an overview of the project-by-project physical modifications starting with the Ocean Outfall, working back through the system on the Bay side, and concluding with the remaining Ocean side projects.

1. Ocean Outfall

The present design of the Ocean Outfall is 670 mgd which is over required capacity. It consists of three 9' inside diameter barrels, one of which is approximately 4 miles in length; the other two barrels approximately 2 miles each. The reschedule proposes phasing, whereby the 4 mile barrel and one 2 mile barrel are constructed initially followed by the construction of the final barrel, when and if needed, and funds are available. In any case, the required capacity is 590 mgd and the final barrel will be appropriately sized.

2. Southwest Plant

During wet weather the Southwest Plant will provide 450 mgd capacity primary treatment. Constructing this plant in phases provides an opportunity to investigate and test second phase alternatives. The first phase has 130 mgd capacity and treats the Ocean side flows. The second phase alternatives are an additional 320 mgd capacity or 140 mgd capacity operating in conjunction with the split flow operation at Southeast Plant.

3. Crosstown Transport

This project will include a section of tunnel which will be bored to transport 460 mgd and will also include a section of force main constructed by open trench. The

tunnel will be segregated into two major chambers under Stage III permitting raw sewage and treated effluent to be transported simultaneously. The Crosstown Pump Station will be built in the vicinity of Islais Creek and will be constructed with a physical structure capable of housing all Master Plan functions, but will have mechanical elements installed as needed, i.e., not all of the mechanical elements will be included in the first phase for the Pump Station. This Pump Station may also include a screening and degritting facility at a capacity suitable to provide pretreated influent to the Southeast Plant operating at 320 mgd.

4. Southeast Plant

The proposed Split-Flow Plan will function during wet weather only; the process will remain as originally designed during dry weather. The wet weather influent will be split into two streams. One stream will be treated through primary treatment facilities up to a maximum hydraulic flow of 180 mgd. The other stream treated through secondary treatment facilities without primary sedimentation up to a maximum flow of 140 mgd. The optimization of these two flows is subject to further investigation but is estimated at 320 mgd. Seventy mgd of the secondary effluent will be disinfected and be discharged into the Bay through the existing outfall; the balance of the effluent will be conveyed crosstown to the Ocean Outfall. Nationwide there are approximately 20 pure oxygen activated sludge plants without primary sedimentation in operation. Presumably, these plants meet the Federal secondary treatment requirements. We are investigating the following four selected plants; Duluth, Minnesota; Tonawanda, New York; Tampa and Hollywood in Florida.

The City's consultant indicates that the proposed Split-Flow Plan is promising. Their investigation report will be complete in July or August 1980, and will be submitted to the RWQCB, SWRCB and EPA for their review.

The Proposed Split-Flow Plan will not affect the City's request for secondary treatment waiver for a dry weather discharge. All applicable dry and wet weather discharge requirements as described in the latest NPDES permit for ocean discharge prescribed by RWQCB in April 1980 will be met.

The implementation schedule of the proposed Split-Flow Plan is as follows:

Step	Start
I	October 1980
II	June 1982
III	July 1983

The Split-Flow Facilities will have only limited operation between their completion (February 1985) and the completion of the Crosstown Pump Station (August 1985) due to limited influent and effluent capacities.

5. Remaining Bayside Facilities

a. A temporary force main would carry flow from the Channel Pump Station to the North Shore System during wet weather during Stage II. This force main would be constructed within the Channel Outfall Consolidation and would require minimum surface disruption. It would be a non-convertible item after the North Point Plant is abandoned.

b. Sunnydale Yosemite - No Change
c. Hunter's Point - No Change
d. Mariposa - No Change

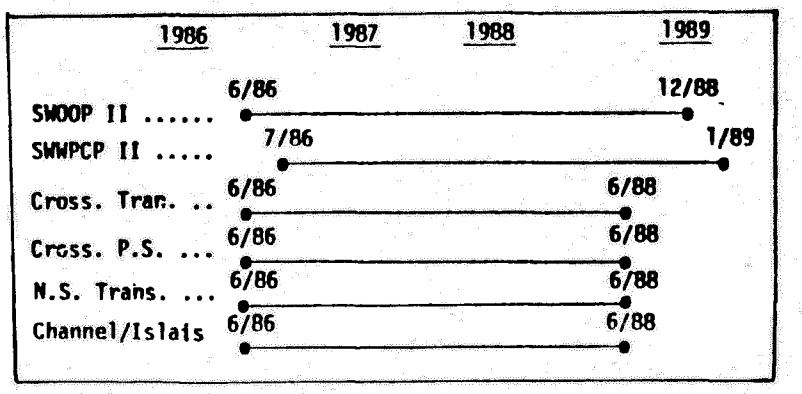
e. Abandonment of the North Point Plant - In order to abandon this plant, it is necessary to have the additional capacity in the Ocean Outfall, treatment capacity at the Southwest Plant, Transport capacity from the North Point Plant through the system, and additional treatment capacity at the Southwest Plant.

6. West Side

The Southwest Plant, Phase I will be in operation a year earlier than originally contemplated and will be in place prior to completion of the Crosstown Tunnel. There is a 7 month period during which there will be no transport capacity for solids to be moved from Southwest to Southeast Plant for processing and disposal. As an interim measure, a small force main is included for sludge handling and disposal at the existing facilities in the Richmond/Sunset Plant. This would potentially be a non-convertible item when the Richmond/Sunset Plant is abandoned, upon completion of the Crosstown Tunnel.

Program-wide Activities	$ 48,000,000	(Program-wide (Grant 1411) ... $25.0 (Area-wide Facil.Planning .... 9.6 (Completed Projects (Grants (0440,0595, 0597, 0749, & 1098) 9.5 (Non-eligible Projects 3.8	$ 47.9
Contracts completed, in progress and required to make work-in-place (system) operational	345,000,000	(NPX ... $29.8 SEWPCP ..... $163.1 (NSOC... 78.6 SE Solids D/W.. 11.5 (COC ... 35.4 SE Comm. Facil. 16.0 (IC-1... 9.3 NP-W/W Conver. 1.1	$344.8
o Hydraulic Core-Westside	533,000,000	(WS Trans. $73.9 Coastal Comm. $ 12.0 (WS Pump Sta 33.4 SWWPCP-Phase I 123.3 (Great Hwy. 28.5 SWOOP-Phase I 257.0 (Oper. Comp. 4.8	$532.9
o Crosstown Transport	318,000,000	(Single Barrel ..... $178.9 (P.S. & F.M. 139.1	$318.0
o Bayside System	291,000,000	(Islais Creek .. 50.2 MS Trans. $ 0.8 (Sunnydale/Yos. 99.7 Div.St.Conn. 7.1 (Hunter's Pt. .. 15.4 Control Sys.10.2 (Mariposa ..... 11.7 Split Flow 43.2 City-wide Solids .. 53.4	$291.7
o Richmond & Lake Merced Trans.	89,000,000	(Richmond Trans. .. $47.9 (Lake Merced Trans. 41.1	$ 89.0
SUB-TOTAL:	$1,624,000,000		

SWOOP - Phase II	$184.8	
SWWPCP - Phase II	309.6	
Crosstown Trans. Compart.	84.6	$ 661,000,000
Crosstown P.S.	49.3	
North Shore Trans.	14.9	
Channel-Islais	17.5	
North Pt. Plant Abandon.	-o-	
	$660.7	



GRAND TOTAL: $2,285,000,000

Note: Project Costs at 15% Annual Inflation to Midpoint Construction

SAN FRANCISCO WASTEWATER PROGRAM

REVISED SCHEDULE

FUTURE COMMITMENT SCHEDULE

FACILITY	STEP	COMMITMENT DATE	INFLATED COST
Program-wide '80	2	7/80	4.0
NPX-6B	2	7/80	.1
NPX-8	2	7/80	.2
COC C-5	2	7/80	.2
ICOC IC-1	3	7/80	.4
SEWPCP Solids	2	7/80	.9
WST W-1	2	7/80	.1
WST W-4	2	7/80	1.5
WST WH	2	7/80	1.2
SWWPCP	2	7/80	8.5
SWWPCP Relocation	2	7/80	.5
NPX-6A	2	7/80	.2
NPWPCP w/w Conversion	2	7/80	.1
City-wide Solids	1	7/80	.5
Bayside Planning	1	7/80	.8
Richmond W-5	1	7/80	.2
Lake Merced W-8	1	7/80	.8
Channel Outfalls	3	9/80	2.4
SEWPCP Community Facility	2	9/80	.9
WST W-3	3	9/80	7.6
SEWPCP w/w Split Flow	1	10/80	.1
WST W-1	3	12/80	62.9
NPX-6B	3	1/81	.5
WST Mitigation	3	1/81	12.0
SWOO Phase 1	3	3/81	242.8
NSOC Activation	3	4/81	3.6
NPX-6A	3	4/81	3.2
Program-wide '81	2	5/81	4.4
North Shore Outfalls	3	5/81	1.3
Crosstown Transport B-1	2	5/81	8.2
Crosstown Transport B-1 Land	2	5/81	2.0
Crosstown Transport B-2	2	5/81	8.7

FACILITY	STEP	COMMITMENT DATE	INFLATED COST
Crosstown Transport B-2 Land	2	5/81	5.5
Islais Creek Transport B-4	2	5/81	2.4
City-wide Control System	2	5/81	.5
Richmond W-5	2	5/81	2.3
NPWPCP w/w Conversion	3	6/81	.9
Sunnydale-Yosemite B-5	2	6/81	4.5
Sunnydale-Yosemite B-5 Land	2	6/81	1.7
Hunters Point B-6	2	6/81	.7
Hunters Point B-6 Land	2	6/81	1.1
SEWPCP Expansion	3	7/81	12.0
Division St. Connection B-3	2	7/81	.3
Division St. Connection B-3 Land	2	7/81	.1
Mariposa B-7	2	7/81	.5
Mariposa B-7 Land	2	7/81	.2
North Shore Transport B-8	2	7/81	.7
Lake Merced W-8	2	8/81	1.2
SEWPCP Community Facility	3	10/81	15.0
City-wide Solids	2	10/81	3.5
City-wide Solids Land	2	10/81	1.0
SWWPCP Phase 1	3	12/81	107.7
SEWPCP Solids	3	12/81	10.6
WST W-4	3	12/81	29.9
WST WH	3	12/81	26.9
Channel Outfalls C-5/NPX 8	3	2/82	4.3
City-wide Control	3	4/82	9.6
Program-wide '82	2	5/82	4.7
SEWPCP w/w Split Flow	2	6/82	1.0
Crosstown Pump Station	3	7/82	123.9
Crosstown Transport B-1	3	8/82	164.9
Richmond W-5	3	8/82	43.9
Sunnydale-Yosemite B-5	3	10/82	90.8
Division St. Connection B-3	3	10/82	6.2
Islais Creek Transport B-4	3	10/82	47.3

FACILITY	STEP	COMMITMENT DATE	INFLATED COST
Mariposa B-7	3	10/82	10.8
Hunters Point B-6	3	12/82	13.5
Lake Merced W-8	3	12/82	39.1
WST Final Components W-7	2	5/83	.2
SEWPCP w/w Split Flow	3	7/83	42.1
City-wide Solids	3	7/83	48.4
WST Final Components W-7	3	9/84	4.6
SWOO Phase II	2	5/85	2.3
SWWPCP Phase II	3	5/86	309.6
Crosstown Transport Stage III	3	5/86	84.6
Crosstown Pump Station Stage III	3	5/86	49.3
North Shore Transport Stage III	3	5/86	14.9
Channel/Islais FM	3	5/86	17.5
SWOO Phase III	3	5/86	182.5
			$1,926.0
Previously Obligated			359.0
Program Cost			$2,285.0

PROPOSED CEASE AND DESIST ORDERS COMPLIANCE SCHEDULES

TASK	PROPOSED CDO DATE	EXISTING CDO DATE
Submit report on facilities needed for compliance with prohibitions re: discharge into confined waters; and 10:1 initial dilution	3/3/80	3/1/80
Issue NTP EIR Consultant Crosstown Transport, Crosstown Pump Station & Force Mains & Islais Creek Transport/ Storage	3/8/80	1/15/80
Issue NTP EIR Consultant Sunnydale/ Yosemite Transport/Storage & Hunters Point Facilities	4/21/80	2/15/80
Start Step 2 Design SWWPCP - Phase I	4/29/80	2/15/80
Submit detailed time schedule for planning, design & construction of North Point Plant Conversion	5/15/80	3/1/80
CCSF submit a Cash Flow Assessment indicating CCSF ability to fund the local share costs of all projects	6/30/80	6/30/80
Issue NTP EIR Consultant Channel-Islais Facilities, Mariposa Facilities & North Shore Wet Weather Transport	7/1/80	4/1/80
Submit Right-of-Way Appraisal Report Bayside Facilities	7/1/80	7/1/80
Start plan of study, S.E. W/W Split Flow	7/1/80	
Board of Supervisors approve Expanded Geotechnical Program Appropriation Bayside Facilities	7/30/80	4/15/80
Start Step 2 Design, S.E. Solids Dewatering	7/30/80	
Board of Supervisors approve Pre-Design Appropriations Bayside Facilities	7/30/80	8/1/80
Start Step 2 Design, NSOC Wet Weather Conversion	8/1/80	

TASK	PROPOSED CDO DATE	EXISTING CDO DATE
Award Westside Transport W-3	9/15/80	
Start Step 1 Facility Plan, S.E. W/W Split Flow	10/1/80	
Complete Final Design - N-2A NSOC Activation	10/1/80	
Complete Final Design, NPX-6B Channel Pump Station Improvement	10/1/80	
Start Final Design, COC - System Conversion	10/1/80	
Complete Construction C-3	10/15/80	3/1/80
Complete Draft EIR & submit to OER for review, Crosstown Transport, Crosstown Pump Station & Force Mains & Islais Creek Transport/ Storage	10/15/80	9/30/80
Complete 50% Design SWWPCP - Phase I	10/15/80	10/15/80
Issue NTP, Westside Transport W-3	10/15/80	
Complete Ocean Outfall Phase 1 Design	10/26/80	
Advertise NPX-6B Channel Pump Station Improvement	11/1/80	
Complete Draft EIR & Project Report Richmond Transport	11/30/80	3/15/80
Complete Draft EIR & submit to OER for review, Sunnydale/Yosemite Transport/Storage & Hunters Point Facilities	11/30/80	11/30/80
Award Westside Transport W-1	12/1/80	
Advertise SWOOP - Phase I	12/15/80	2/15/80
Complete Draft EIR & submit to OER for review, Channel-Islais Facilities, Mariposa Facilities & North Shore Wet Weather Transport	12/30/80	10/30/80

TASK	PROPOSED CDO DATE	EXISTING CDO DATE
Award NPX-6B Channel Pump Station Improvement	1/81	
Complete Design - NPX-6A W/W Force Main	1/81	
Issue NTP Westside Transport W-1	1/81	
Advertise N-2A NSOC Activation	1/81	
Start Pre-Design Crosstown Transport & Crosstown Pump Station & Force Mains	2/81	11/1/80
Advertise NPX-6A W/W Force Main	2/81	
Complete Design NSOC Wet Weather Conversion	2/81	
Complete Draft EIR & Project Report Lake Merced Transport	2/81	7/1/80
Complete Draft EIR, Lake Merced Transport	2/81	
Issue NTP NPX-6A W/W Force Main	3/81	
Advertise NSOC Wet Weather Conversion	3/81	
Certify EIR & complete Project Report Crosstown Transport, Crosstown Pump Station & Force Mains & Islais Creek Transport/Storage	3/81	2/1/81
Certify EIR Richmond Transport	3/81	6/30/80
Complete Construction North Shore Pump Station	3/26/81	3/1/81
Board of Supervisors approve Facility Plan Phase I Crosstown Transport, Crosstown Pump Station & Force Mains & Islais Creek Transport/Storage	3/81	2/15/81
Award NPX-6A W/W Force Main	4/81	

TASK	PROPOSED CDO DATE	EXISTING CDO DATE
Award N-2A NSOC Activation	4/81	
Certify EIR & complete Project Report Sunnydale/Yosemite Transport/Storage & Hunters Point Facilities	4/15/81	4/1/81
Board of Supervisors approve Facility Plan Phase II Sunnydale/Yosemite Transport/Storage & Hunters Point Facilities	4/30/81	4/15/81
Start Pre-Design Sunnydale/Yosemite Transport/Storage	5/81	3/1/81
Award SWOOP - Phase I	5/81	8/1/80
Start Step 2, Design Richmond Transport	5/81	9/15/80
Complete Redesign Westside Pump Station	5/81	
Certify EIR & complete Project Report Channel-Islais Facilities, Mariposa Facilities & North Shore Wet Weather Transport	5/81	3/1/81
Start Step 2, Design Crosstown Transport, Crosstown Pump Station & Force Main & Islais Creek Transport/Storage	6/81	3/1/81
Board of Supervisors approve Facility Plan Phase III Channel-Islais Facilities, Mariposa Facilities & North Shore Wet Weather Transport	6/81	3/15/81
Issue NTP - N-2A NSOC Activation	6/81	
Award NSOC Wet Weather Conversion	6/81	
Complete Step 2 Design S.E. Solids Dewatering	6/81	
Issue NTP NPX-6A W/W Force Main	6/81	
Issue NTP - Step 2 City-Wide Control System	6/81	

TASK	PROPOSED CDO DATE	EXISTING CDO DATE
Issue NTP SWOOP - Phase I	6/81	10/11/80
Complete Step 2, Design SWWPCP-Phase I	6/30/81	6/30/81
Advertise last contract Westside Transport & Pump Station	7/81	7/30/80
Certify EIR Lake Merced Transport	7/81	11/30/80
Start Step 2, Design Sunnydale/ Yosemite Transport/Storage	7/81	5/1/81
Start Step 2, Design Hunters Point Facilities	7/81	12/1/81
Advertise SWWPCP - Phase I	7/30/81	7/30/81
Start Step 2, Design Channel-Islais Facilities & North Shore Wet Weather Transport	8/81	4/1/81
Start Step 2, Design Mariposa Facilities	8/81	11/1/81
Advertise S.E. Solids Dewatering	8/81	
Issue NTP NSOC Wet Weather Conversion	8/81	
Start Step 2 Design Lake Merced Transport	8/81	1/15/81
Complete Construction NPX-6B Channel Pump Station Improvement	9/81	
Complete 50% Design Crosstown Transport & Crosstown Pump Station & Force Main	10/81	7/1/81
Complete Final Design S.E. COC - System Conversion	10/81	
Advertise COC - System Conversion	11/81	
Complete Step 1 City-Wide Solids Handling	11/81	

TASK	PROPOSED CDO DATE	EXISTING CDO DATE
Complete Step 2 Design City-Wide Control System	11/81	
Award all SWWPCP contracts - Phase I	11/30/81	11/30/81
Complete 50% Design Islais Creek Transport/Storage	12/81	10/15/81
Award all contracts Westside Transport & Pump Station	12/81	10/30/80
Award S.E. Solids Dewatering	12/81	
Start Step 2 Design City-Wide Solids Handling	12/81	
Advertise City-Wide Control System	12/81	
Issue NTP S.E. Solids Dewatering	1/82	
Complete 50% Design Mariposa Facilities	1/82	5/1/82
Complete 50% Design Hunters Point Facilities	1/82	6/1/82
Complete 50% Design Channel-Islais Facilities	1/82	9/15/81
Complete 50% Design North Shore Wet Weather Transport	1/82	10/1/81
Complete 50% Design Sunnydale/Yosemite Transport/Storage	1/82	11/81
Issue NTP, last contract Westside Transport & Pump Station	1/82	11/30/80
Issue NTP SWWPCP - Phase I	2/82	1/30/82
Complete Step 2, Design Crosstown Transport & Crosstown Pump Station & Force Mains	2/82	11/1/81
Award COC - System Conversion	2/82	

TASK	PROPOSED CDO DATE	EXISTING CDO DATE
Complete Step 2, Design Richmond Transport	3/82	7/15/81
Advertise Crosstown Transport & Crosstown Pump Station & Force Mains	3/82	12/1/81
Complete Construction NPX-6A & 6B	3/82	
Complete Construction NPX-6A W/W Force Main	3/82	
Issue NTP COC - System Conversion	4/1/82	
Complete Step 1 Facility Plan, S.E. W/W Split Flow	4/82	
Advertise Richmond Transport	5/82	9/15/81
Complete Step 2, Design Mariposa Facilities	5/82	11/1/82
Issue NTP City-Wide Control System	5/82	
Complete Step 2, Design Channel-Islais Facilities	6/82	3/1/82
Complete Step 2, Design Islais Creek Transport/Storage	6/1/82	6/1/82
Advertise Mariposa Facilities	6/82	12/1/82
Complete Step 2, Design Hunters Point Facilities	6/82	12/1/82
Start Step 2 Design, S.E. W/W Split Flow	6/82	
Complete Step 2, Design North Shore Wet Weather Transport	6/82	4/1/82
Complete Step 2, Design Lake Merced Transport	7/82	1/15/82
Advertise Channel-Islais Facilities - Stage II	7/82	4/1/82
Award Crosstown Pump Station & Force Mains - Stage II	7/82	4/1/82
Complete Step 2, Design Sunnydale/ Yosemite Transport/Storage	7/82	5/1/82

TASK	PROPOSED CDO DATE	EXISTING CDO DATE
Advertise Hunters Point Facilities	7/82	1/1/83
Advertise Islais Creek Transport/ Storage	7/1/82	7/1/82
Complete Construction Southeast Plant	7/82	7/30/82
Issue NTP Crosstown Pump Station & Force Main - Stage II	8/82	5/1/82
Advertise Sunnydale/Yosemite Transport/Storage	8/82	6/1/82
Complete Construction NSOC Wet Weather Conversion	8/82	
*Full Compliance with RWQCB Requirements		7/1/83
Award Richmond Transport	8/82	12/15/81
Advertise Lake Merced Transport	9/82	2/15/82
Award all contracts Crosstown Transport - Stage II	9/82	5/1/82
Complete Construction N-2A NSOC Activation	9/82	
Complete all North Shore Storage & Transport Facilities contracts including N-2A; commence interim operation utilizing North Point Plant	9/82	3/1/82
Issue NTP Richmond Transport	9/82	2/15/82
Issue NTP all contracts Crosstown Transport - Stage II	10/82	9/1/82
Award Mariposa Facilities	11/82	5/1/83
Award Channel-Islais Facilities - Stage II	11/82	8/1/82
Award all contracts Islais Creek Transport/Storage	11/1/82	11/1/82
Issue NTP Islais Creek Transport/ Storage	12/1/82	12/1/82

*See narrative

TASK	PROPOSED CDO DATE	EXISTING CDO DATE
Commence interim operation utilizing Southeast Plant & Channel Storage Facilities; complete System Conversion	12/1/82	12/1/82
Award Hunters Point Facilities	12/82	6/1/83
Issue NTP all contracts Channel-Islais Facilities - Stage II	12/82	9/1/82
Award all contracts Sunnydale/ Yosemite Transport/Storage	12/82	11/1/82
Complete Construction S.E. Solids Dewatering	12/82	
Complete Step 2 Design City-Wide Solids Handling	12/82	
Award Lake Merced Transport	12/82	5/15/82
Issue NTP all contracts Sunnydale/ Yosemite Transport/Storage	1/83	3/1/83
Issue NTP Mariposa Facilities	1/83	6/1/83
Issue NTP Hunters Point Facilities	1/83	7/1/83
Issue NTP Lake Merced Transport	1/83	8/30/82
Advertise City-Wide Solids Handling	2/83	
Complete Step 2 Design, S.E. W/W Split Flow	3/83	
Advertise S.E. W/W Split Flow	4/83	
Start Design, Final Operational Components	6/83	
Award City-Wide Solids Handling	7/83	
Award S.E. W/W Split Flow	7/83	
Issue NTP S.E. W/W Split Flow	8/83	
Issue NTP City-Wide Solids Handling	8/83	

TASK	PROPOSED CDO DATE	EXISTING CDO DATE
Complete Design Final Operational Components, Westside	3/84	
Complete Construction, City-Wide Control System	5/84	
Advertise Final Operational Components, Westside	5/84	
Complete Construction Mariposa Facilities	6/84	
Complete Construction Westside Transport & Pump Station	7/84	1/1/83
Complete Construction Hunters Point Facilities	7/84	
Award Final Operational Components, Westside	9/84	
Issue NTP Final Operational Components, Westside	10/84	
Complete Construction Channel-Islais Facilities - Stage II	12/84	
Complete SWOOP construction - Phase I	12/84	
Complete Construction S.E. W/W Split Flow	2/85	
Complete Construction City-Wide Solids Handling	2/85	
Complete Construction - Phase I SWWPCP	2/85	
Complete Construction Richmond Transport	2/85	
Complete Construction Lake Merced Transport	2/85	
Start Step 2 Design SWOOP - Phase II	5/85	
Complete Islais Creek Transport/Storage	6/85	
Complete Construction Crosstown Pump Station & Force Mains - Stage II	8/85	
Complete Construction Final Operational Components, Westside	10/85	

TASK	PROPOSED CDO DATE	EXISTING CDO DATE
Complete Construction Sunnydale/Yosemite Transport/Storage	11/85	
Complete Design SWOOP - Phase II	11/85	
Complete Construction Crosstown Transport - Stage II	12/85	
Advertise North Shore Wet Weather Transport - Stage III	1/86	5/1/82
Advertise Crosstown Transport & Crosstown Pump Station & Force Main - Stage III	1/86	
Advertise Channel-Islais Facilities - Stage III	1/86	
Advertise SWOOP - Phase II	1/86	
Advertise SWWPCP - Phase II	1/86	
Award Channel-Islais Facilities - Stage III	5/86	
Award North Shore Wet Weather Transport - Stage III	5/86	9/1/82
Award Crosstown Transport & Crosstown Pump Station & Force Main - Stage III	5/86	
Award SWOOP - Phase II	5/86	
Issue NTP SWOOP - Phase II	6/86	
Award SWWPCP - Phase II	5/86	
Issue NTP North Shore Wet Weather Transport - Stage III	6/86	10/1/82
Issue NTP Crosstown Transport & Crosstown Pump Station & Force Main - Stage III	6/86	
Issue NTP Channel-Islais Facilities - Stage III	6/86	

TASK	PROPOSED CDO DATE	EXISTING CDO DATE
Issue NTP SWWPCP - Phase II	7/86	
Complete Construction Crosstown Transport - Stage III	6/88	
Complete Construction Crosstown Pump Station & Force Mains - Stage III	6/88	
Complete Construction Channel-Islais Facilities - Stage III	6/88	
Complete Construction North Shore Wet Weather Transport - Stage III	6/88	
Complete Construction SWOOP - Phase II	12/88	
Complete Construction SWWPCP - Phase II	1/89	

APPENDIX G

SEE APPENDIX G ATTACHED HERETO

FROM (OR ACTION) EPA, Administrator's Office Washington, D.C. 20460	PRECEDENCE ACTION P INFO	UNCLAS
ACCOUNTING CLASSIFICATION 0A272SA011	DATE PREPARED 5/29/80	TYPE OF MESSAGE [X] SINGLE [ ] FLASH [ ] MULTIPLE ADDRESS
FOR INFORMATION CALL		
BY Henry L. Longest II	PHONE NUMBER 426 8850	

THIS SPACE FOR USE OF COMMUNICATION UNIT

MESSAGE TO BE TRANSMITTED (Use double spacing and all capital letters)

TO:

MAYOR DIANE FEINSTEIN
RM 200, CITY HALL
SAN FRANCISCO, CALIFORNIA

THIS IS TO ASSURE YOU THAT FEDERAL FUNDS WILL BE AVAILABLE AS LONG AS SAN FRANCISCO CONTINUES ITS POLLUTION ABATEMENT PROGRAM. BEGINNING IN SEPTEMBER A PORTION OF THE FISCAL YEAR 1980 FUNDS WHICH ARE ALREADY APPROPRIATED BUT HAVE BEEN DEFERRED WILL BE MADE AVAILABLE. THE TOTAL AMOUNT OF APPROPRIATED FUNDS FOR FISCAL YEAR 1980 WILL BE AVAILABLE IN 1981. BY THE END OF FISCAL YEAR 1981 EACH STATE WILL HAVE ACCESS TO ITS FULL ALLOTMENT OF 1980 FUNDS AND A SUBSTANTIAL PORTION OF ITS FISCAL YEAR 1981 APPROPRIATION.

BARBARA BLUM
DEPUTY ADMINISTRATOR DATE SIGNED

PAGE NO. 1	NO. OF PGS 1	SECURITY CLASSIFICATION UNCLAS

STANDARD FORM 14
SIMPLIFIED
GSA FPMR (41 CFR) 101-11.206

APPENDIX H